DOCUMENT RESUME

ED 239 300 CS 208 121

AUTHOR Bellott, Fred K.; Bowman, Harry L.
TITLE Comparative Assessment of College Student Performance in Developmental and Freshman English Courses.
PUB DATE Nov 83
NOTE 21p.; Paper presented at the Annual Meeting of the Mid-South Educational Research Association (12th, Nashville, TN, November 16-18, 1983).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Academic Achievement; *College English; College Students; Comparative Analysis; *Course Evaluation; *Developmental Programs; Educational Research; English Instruction; *Grades (Scholastic); Higher Education; Program Effectiveness; Program Evaluation; *Student Needs; *Writing Instruction; Writing Skills
IDENTIFIERS *Freshman Composition

ABSTRACT

To evaluate the effectiveness of a developmental composition course for students without adequate basic skills, a comparative analysis was conducted of the course grades of students (1) taking the developmental course, (2) repeating the developmental course, (3) taking the required composition course, and (4) taking the required course after taking the developmental course. Data for the first three semesters the developmental course was offered showed that three-fifths of the students completing the course received a "C" or higher and that students repeating the course had a relatively high success rate on the second attempt. Student success rates in the required freshman English course rose after the developmental course. Furthermore, students who took the developmental course were more likely to succeed in that course and the second required English course than in the first required English course. The findings indicated that the developmental English course served the needs of students who had the ability but lacked the basic skills for success in the regularly required English courses. (Extensive tables are included.) (MM)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

ED239300

COMPARATIVE ASSESSMENT OF COLLEGE STUDENT PERFORMANCE IN DEVELOPMENTAL AND FRESHMAN ENGLISH COURSES

Fred K. Bellott
Harry L. Bowman
College of Education
Memphis State University
Memphis, Tennessee 38152

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Fred K. Bellott

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

CS 208 121

Paper presented at the Twelfth Annual Meeting of the Mid-South Educational Research Association in Nashville, Tennessee, November 16-18, 1983

Introduction

Preceding the start of the Fall Semester, 1980, at Memphis State University, the Department of English offered special sections of its regular first-semester freshman English course (English 1101-T) for students who were not adequately prepared in composition skills for the regular course. The developmental course included a review of grammar and mechanics in addition to the regular course content (5). Students who obtained American College Testing (ACT) Assessment (1) English scores of 16 or below were advised to take the developmental course.

The problems encountered in operating the developmental course and the lack of success by students in the course led to the design of a credit-producing course to meet the needs of students without adequate basic writing skills. A procedure was developed to screen students who would probably need the course and to determine placement in the developmental or regular course based on the results of an essay test. The new three-credit-hour course was implemented in the Fall Semester, 1980, as English 1100 - Introduction to Composition. The course covers a review of language fundamentals and grammar with extensive practice in writing sentences and paragraphs (3).

The screening and placement procedures used with English 1100 involve both the University's admissions test and an English placement essay test. Students who score below 19 on the English section of the ACT admissions test are required to write a placement essay that is evaluated on a scale of 1 to 6 using procedures specified by the City University of New York Writing Skills Assessment Test (4). Any student who scores 3 or below on the essay that is assessed by at least two trained readers is required to take and pass English 1100 before enrolling in English 1101. Students who have ACT English scores of 19 or above may elect to take English 1100 as an option.

During the Spring Semester, 1983, the Office of the Vice President for Academic Affairs at Memphis State University requested that personnel in the Bureau of Educational Research and Services, College of Education, assist in conducting an evaluation of English 1100. The investigators who conducted this study met with representatives from the Office of the Vice President and the Department of English in February, 1983, to obtain an orientation on the course and to define the task. A set of questions was formulated to provide a structure for the evaluation.

Problem

The problem addressed in this paper focused on the primary concern in the evaluative study of English 1100: a comparative assessment of student performance in English 1100 and subsequent freshman-level English courses. Other aspects of the course evaluation were concerned with English 1100 screening procedures, attitudes of students and faculty members toward the course, relationships among variables representing performance measures, and costs (2). The variable of major interest in this paper was the course grades of students who took English 1100 during the Fall Semester, 1980-83, and English 1101 during the Fall Semester, 1978-83. Course grades of English 1100 students from the Fall Semester, 1980, who took English 1101 and English 1102 were also used in one facet of the study.

Hypotheses

Descriptive data were compiled and analyzed on the course performance measure for all groups involved in the study. In addition, four null hypotheses were formulated and tested:

1. There is no difference in the distributions of English 1101 students classified by course performance category (passed/did not pass) and time period (Fall, 1978-79/Fall, 1980-82).

2. There is no difference in the distributions of students in the Fall, 1980-82, classified by course performance category and English course (1100/1101).

3. There is no difference in the distributions of students who repeated English 1100 classified by first grade (D/F) and second grade (A-C/D-F).

4. There are no differences in the distributions of students who took English 1100 in the Fall, 1980, classified by course performance category and English course (1100/1101/1102).

The .05 level of significance was used in testing the hypotheses.

The investigation of the variables and hypotheses defined in the study was important for two reasons. First, since English 1100 is a prerequisite to the mandatory English course series for certain students and does not meet any degree requirements, students should not be required to take the course unless it contributes to successful performance in subsequent English courses. Second, the limited financial resources of the University should not be used to subsidize the cost of English 1100 unless students receive academic benefits from it.

Procedures

As a component of a retrospective evaluation, this study utilized data that were obtained from existing sources. Grade distributions for the English 1100 and English 1101 courses were compiled from the reports on individual sections of these courses. (These data were prepared by faculty members in the Department of English.) Distributions of grades in English 1100, 1101, and 1102 were prepared for students who took English 1100 in the Fall Semester, 1980, and were tracked through the subsequent English courses that they would be required to take. A bivariate distribution of grades for students who repeated English 1100 because of an inadequate initial grade was produced from student records. (These two latter data preparation procedures were performed by the Computer Center.)

Comparative analyses were conducted with the course grades for English 1101 using variable bases prior to the implementation of English 1100. The hypotheses stated for the study were tested by applying the Chi-square technique with frequency distributions. The data for the hypotheses involving course performance categories were inclusive of all letter designations reported at the end of the course, thereby including the designations for drop (DP), incomplete (I), time extension/re-enroll (T), audit (AD), and withdrawal (W). Grades of A-C, the requirement for successful course completion, were classified as "pass" while all other letter designations were classified as "did not pass."

Results

The results of this study are presented in a set of nine tables. The descriptive and inferential analyses are reported in a logically organized sequence.

The grade distributions for English 1100 students in the Fall Semesters of 1980-82 are depicted in Table 1. Almost 59 percent of the students who took the course during the first semester that it was offered - Fall, 1980 - achieved a passing grade (A, B, or C). The percentages of students who passed in the next two fall semesters were approximately 70 percent in the Fall Semester, 1981, and 68 percent in the Fall Semester, 1982. In comparison to the initial fall semester, the percentages of both A's and B's received by English 1100 students revealed progressive increases for the subsequent two fall semesters. These increases in percentages indicated that larger proportions of the students who took the course received grades above the minimum required for satisfactory course completion. The percentages of students who did not receive a course completion grade (DP, I, T, AD, or W) remained relatively stable at slightly above 7 percent for each fall semester.

Table 1

Grade Distributions of Students in English 1100 - Fall, 1980-82

Grade	Semester					
	Fall, 1980		Fall, 1981		Fall, 1982	
	f	%	f	%	f	%
A	10	1.79	23	3.26	35	4.81
B	63	11.25	147	20.85	163	22.42
C	225	45.54	327	46.38	295	40.58
Subtotal	328	58.57	497	70.50	493	67.81
D	105	18.75	63	8.94	86	11.83
F	87	15.54	95	13.48	94	12.93
DP	22	3.93	16	2.27	22	3.03
I	0	0.00	4	.57	5	.69
T	0	0.00	0	0.00	0	0.00
AD	0	0.00	1	.14	0	0.00
W	18	3.21	29	4.11	27	3.71
Subtotal	232	41.43	208	29.50	234	32.19
Total	560	100.01*	705	100.00	727	100.00

*Does not add to 100.00 percent due to rounding off

Table 2 presents the grade distributions for English 1101 students in the Fall Semesters of 1978-82. The first two fall semesters provided baseline data for the course before English 1100 was implemented as a mandatory course for some students and while English 1101-T was offered on an elective basis. During this period, the percentage of students who passed the course was about 60 percent (58.56 percent in the Fall Semester, 1978, and 61.80 percent in the Fall Semester, 1979). The three-year period between 1980 and 1982 provided comparative data after English 1100 was implemented. During this period, the percentage of students who passed English 1101 increased to more than 75 percent (77.65 percent in the Fall Semester, 1980; 74.68 percent in the Fall Semester, 1981; and 74.11 percent in the Fall Semester, 1982). As was observed above for the English 1100 students, larger percentages of the students received A's and B's in English 1101 after the implementation of English 1100. There was also an overall decline in the percentages of students who did not receive a course completion grade.

Comparisons of percentages of students who passed English 1101 (i.e., earned an A, B, or C) are depicted in Table 3 using base years before the implementation of English 1100. Using the Fall Semester, 1978, as the base, there was a small increase in the percentage of passes in the Fall Semester, 1979; however, the increases in percentages for the Fall Semesters, 1980-82, ranged from slightly below 16 percent to over 19 percent. Using the Fall Semester, 1979, as the base, the increases in percentages for the Fall Semesters, 1980-82, varied from a little more than 12 percent to almost 16 percent. If the Fall Semesters, 1978-79, are combined to provide a base, the percentages of increase in passes for the Fall Semesters, 1980-82, ranged from almost 14 percent to more than 17 percent.

Table 2

Grade Distributions of Students in English 1101 - Fall, 1978-82

Grade	Semester									
	Fall, 1978		Fall, 1979		Fall, 1980		Fall, 1981		Fall, 1982	
	f	%	f	%	f	%	f	%	f	%
A	161	6.18	192	7.36	209	10.71	197	10.96	236	10.97
B	494	18.96	549	21.03	620	31.78	501	27.86	642	29.85
C	871	33.42	872	33.41	686	35.16	645	35.87	716	33.29
Subtotal	1,526	58.56	1,613	61.80	1,515	77.65	1,343	75.69	1,594	74.11
D	283	10.86	288	11.03	114	5.84	143	7.95	133	6.18
F	376	14.43	373	14.29	165	8.46	184	10.23	208	9.67
DP	120	4.60	87	3.33	65	3.33	64	3.56	76	3.53
I	9	.35	8	.31	23	1.18	7	.39	83	3.86
T	196	9.52	125	4.79	1	.05	1	.06	2	.09
AD	3	.12	0	0.00	2	.10	1	.06	1	.05
W	93	3.57	116	4.44	66	3.38	55	3.06	54	2.51
Subtotal	1,080	41.44	997	38.20	436	22.35	455	25.31	557	25.89
Total	2,606	100.01*	2,610	99.99*	1,951	99.99*	1,798	100.00	2,151	100.00

*Does not add to 100.00 percent due to rounding off

Table 3

Comparison of Pass Rates for Students in English 1101 Using Variable Bases

Semester	Pass - A, B, C %	Increase over 1978 base	Increase over 1979 base	Increase over 1978-79 base*
Fall, 1978	58.56	-----	-----	-----
Fall, 1979	61.80	3.24	-----	-----
Fall, 1980	77.65	19.09	15.85	17.47
Fall, 1981	74.69	16.13	12.89	14.51
Fall, 1982	74.11	15.55	12.31	13.93

*60.18%

Table 4 presents the results of the Chi-square comparison of the frequency distributions on course performance for 11,116 English 1101 students in the Fall Semesters, 1978-79, and the Fall Semesters, 1980-82. The distributions showed that about 60 percent of the students passed the course before English 1100 was initiated (1978-79) while more than 75 percent passed after implementation (1980-82). The increase in the percentage might have been anticipated as a result of requiring students with inadequate basic composition skills to pass a developmental course before taking English 1101. The Chi-square comparison was significant at the .05 level of significance. Therefore, Hypothesis 1 concerning no difference in the frequency distributions was rejected.

The comparison of the frequency distributions of English 1100 and English 1101 students on course performance for the Fall Semesters, 1980-82, using the Chi-square procedure is reported in Table 5. Approximately 66 percent of the 1,992 English 1100 students passed the course during these three semesters while, as stated previously, more than 75 percent of the 5,900 English 1101 students passed. The lower percentage who passed among students in English 1100 than in English 1101 might offer evidence that the developmental course is reasonably demanding academically. The results of the Chi-square analysis of the distributions were significant at the .05 level of significance. Consequently, Hypothesis 2 stating that the difference is not significant was rejected.

Since students assigned to English 1100 must earn a grade of C or higher before taking English 1101, an analysis of the grades for students who repeat the developmental course was of interest to the investigators. A comparison of the first and second grades of 160 students who repeated English 1100 between the Fall Semester, 1980, and the Spring Semester, 1982, is shown in Table 6.

Table 4

Chi-Square Comparison of Frequency Distributions on Student Performance in English 1101 - Fall, 1978-79 and Fall, 1980-82

Performance Category	Time Period				
	Fall, 1978-79		Fall, 1980-82		Total
	f	%	f	%	f
Passed	3,139	60.2	4,452	75.5	7,591
Did not pass	2,077	39.8	1,448	24.5	3,525
Total	5,216	100.0	5,900	100.0	11,116

Chi-square = 298.45 (Chi-square = 3.84, df = 1, level of significance = .05)

Table 5

Chi-Square Comparison of Frequency Distributions on Student Performance in English 1100 and English 1101 - Fall, 1980-82.

Performance Category	Course				
	English 1100		English 1101		Total
	f	%	f	%	f
Passed	1,318	66.2	4,452	75.5	5,770
Did not pass	674	33.8	1,448	24.5	2,122
Total	1,992	100.0	5,900	100.0	7,892

Chi-square = 65.42 (Chi-square = 3.84, df = 1, level of significance = .05)

Table 6

Comparison of First and Second Grades for Students in English 1100 - Fall, 1980-Spring, 1982

Second Grade	First Grade D		First Grade F		Total	
	f	%	f	%	f	%
A	2	1.89	0	0.00	2	1.25
B	13	12.26	3	5.56	16	10.00
C	55	51.89	12	22.22	77	48.13
Subtotal	70	66.04	15	27.78	85	53.13
D	22	20.75	8	14.81	30	18.75
F	14	13.21	31	57.41	45	28.13
Subtotal	36	33.96	39	72.22	75	46.87
Total	106	100.00	54	100.00	160	100.00

For the composite group who did not pass the course on the first attempt, slightly more than 53 percent passed the course on the second attempt. If the student received a D the first time, there was a much better chance of passing the second time (66 percent) than if the student earned an F (almost 28 percent). A majority (more than 57 percent) of the students who received an F on the first attempt also received an F on the second attempt. The Chi-square comparison of the pass (A-C)/fail (D-F) distributions of English 1100 students who earned a D or F initially and repeated the course as reported in Table 7 revealed a significant difference at the .05 level of significance. Hypothesis 3 suggesting that the difference is not significant must be rejected.

Table 8 presents the grade distributions of students who took English 1100 the first time in the Fall Semester, 1980, and subsequently attempted one or both of the freshman-level English courses (1101 and 1102) by the Fall Semester, 1982. Data available on 525 English 1100 students showed that 72 percent obtained a passing grade on one or more attempts in the course. Almost 63 percent of the 344 students who took English 1101 achieved a passing grade. In English 1102, 70 percent of the 207 students obtained a passing grade. The reduction in the total number of students at each course level in the progression through English 1102 probably represents typical attrition and postponement rates from course to course. On the other hand, the number of students who took each higher level course represented a very high precentage of the number of students who satisfactorily completed the next lower level course: 344 who took English 1101 while 379 passed English 1100 (91 pecent) and 207 who took English 1102 while 216 passed English 1101 (96 percent).

The frequency distributions of students who passed or did not pass the three levels of English courses and the results of a Chi-square comparison are reported in Table 9. The percentages of students who passed each course (i.e.,

Table 7

Chi-Square Comparison of Frequency Distributions on Grade Categories for English 1100 Students Who Earned a D or F Initially and Repeated the Course - Fall, 1980 - Spring, 1982

Second Grade	First Grade				
	D		F		Total
	f	%	f	%	f
A-C	70	66.0	15	27.8	85
D-F	36	34.0	39	72.2	75
Total	106	100.0	54	100.0	160

Chi-square = 21.07 (Chi-square = 3.84, df = 1, level of significance = .05)

Table 8

Grade Distributions in English 1100, 1101, and 1102 for Fall, 1980, English 1100 Students

Grade	Course					
	English 1100		English 1101		English 1102	
	f	%	f	%	f	%
A	12	2.29	15	4.36	7	3.38
B	75	14.29	53	15.41	32	15.46
C	292	55.62	148	43.02	106	51.21
Subtotal	379	72.19	216	62.79	145	70.05
D	58	11.05	52	15.12	22	10.63
F	83	15.81	42	12.21	20	9.66
DP	1	.19	21	6.10	14	6.76
W/I	4	.76	13	3.78	6	2.90
Subtotal	146	27.81	128	37.21	62	29.95
Total	525	100.01*	344	100.00	207	100.00

*Does not add to 100 percent due to rounding off.

Table 9

Chi-Square Comparison of Frequency Distributions on Student Performance in English 1100, 1101, and 1102 for Fall, 1980, English 1100 Students

Performance Category	Course						
	English 1100		English 1101		English 1102		Total
	f	%	f	%	f	%	f
Passed	379	72.2	216	62.8	145	70.0	740
Did not pass	146	27.8	128	37.8	62	30.0	336
Total	525	100.0	344	100.0	207	100.0	1,076

Chi-square = 8.73 (Chi-square = 5.99, df = 2, level of significance = .05)

earned grades of A-C) are discussed in the narrative relating to the previous table, indicating that the percentage was lowest for English 1101 while the percentages were almost equal for English 1100 and 1102. The percentages of students who did not pass comprise the remainder of the students who attempted each course. The Chi-square results indicated that the distributions differed significantly at the .05 level of significance. Therefore, Hypothesis 4 stating that the differences are not significant was rejected. A subsequent unreported analysis using only the grades representing course completion (A-F) produced a non-significant Chi-square value.

Conclusions

A comparative assessment of college student performance in developmental and freshman English courses was the purpose of the study reported in this paper. The conclusions are based on the results of the descriptive and inferential analyses presented.

The data for the first three fall semesters when the developmental course (English 1100) was offered suggest that the course is successful in addressing the basic composition skill deficiencies of many entering college students. Three-fifths of the students who complete the course achieve a satisfactory grade (A-C). The success rate is appreciably higher after the initial fall semester in which the course was offered, possibly reflecting refinements in the course content and instructional procedures. Students who do not successfully complete the course on the initial attempt have a relatively high success rate on the second attempt.

Using baseline data on course performance of students in the first required English course (1101) during the two fall semesters preceding the initiation of the developmental course, English 1101 students demonstrate higher success rates in the three subsequent fall semesters. The contrast in

course success rates is expected because many students who do not possess the prerequisite composition skills for success in English 1101 are placed in the developmental course instead of being permitted to take English 1101. By reducing the range of composition skills among the English 1101 students, the instructors can improve their instructional effectiveness and contribute to increased student success.

A difference exists in the success rates of students in the developmental English course and the first required English course. The lower success rate for the developmental course adds credibility to its academic status. Furthermore, the legitimacy of the need for the course is supported at least partially by this evidence.

Students who take the developmental course are more likely to succeed in this course and the second required English course (1102) than in the first required English course (1101). More than nine-tenths of the students who successfully complete the developmental course attempt the first required course while nineteen-twentieths of the students who complete the first required course attempt the second required course. The success rate in English 1101 of the students who satisfactorily complete the developmental course is somewhat lower than the rate for English 1100 but is very respectably high with more than three-fifths of these students achieving a satisfactory grade. Seven-tenths of the developmental students who complete English 1101 satisfactorily are successful in English 1102.

The study reveals that students who are assigned to English 1100 receive benefits as measured by their performance in the course and required freshman-level English courses. These results are obtained with students who are deficient in basic composition skills when they begin their college programs and, therefore, are less likely to succeed in their English courses than more

academically prepared students. Since the developmental English course enables certain students to be successful in required college English courses and remain in school, the University has ample justification for the allocation of resources to support English 1100 and thereby serve the needs of students who have the ability but lack the basic skills for success in these required English courses.

References

1. ACT assessment. Iowa City, Iowa: American College Testing Program, 1959-77.

2. Bowman, H. L., & Bellott, F. K. Summative evaluation of the Memphis State University English 1100 program - 1980-83. Memphis: Memphis State University, 1983.

3. Bulletin of Memphis State University: undergraduate issue, 1981-82. Memphis: Memphis State University, 1981.

4. CUNY writing skills assessment test. New York: The City University of New York, 1980.

5. Department of English. Developmental English program. Memorandum to the Dean's Council, Memphis State University; January 31, 1980.